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ABSTRACT

The purpose of the final project report is to communicate the results of research. This document serves as a guide to the preparation of final reports on research in vocational-technical education. Close cooperation between the principal investigator and Research Coordinating Unit (RCU) staff assigned to the project can resolve many report writing difficulties, but in conjunction with this the document discusses: how to write a final report, what method of analysis will be used in data selection, a list of final report specifications, and what criteria are needed in submitting a final report. A Tennessee RCU staff list and two appendixes (a sample cover page and cover letter) are included. (BP)

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Research Series No. 41

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# Preparing
# RESEARCH AND DEVELOPMENT PROJECT REPORTS
# for
# Vocational-Technical Education

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Research Series #41

# PREPARING
# RESEARCH AND DEVELOPMENT PROJECT REPORTS
# FOR
# VOCATIONAL-TECHNICAL EDUCATION

BY

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July 1973

## FOREWORD

The true value and success of a research or development project is the ultimate effect it has on education. Conducting a research and development project is of little value to education if the findings are not disseminated to other educators. Therefore, inherent in the acceptance of support for a project is the obligation to make known the final results.

This handbook is designed to serve as a guide in the preparation of final reports for research and development projects in vocational-technical education. The handbook is designed for writers of final reports. No suggestions are given in the handbook on how to write. It is assumed that the writer who feels a need for further training in composition will consult a reliable up-to-date book on English composition.

The handbook deals only with preparing reports for completed research and development projects. A related publication on writing proposals for research and development projects is available from the RCU.

Vocational educators are indebted to the scholarly effort of Dr. Edwin Lamberth for his preparation of this publication.

Garry R. Bice
Director
Research Coordinating Unit

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## INTRODUCTION

The purpose of the final project report is to communicate the results of the research and/or development clearly and accurately to interested readers. In effect, a good project report tells the reader where he is going, takes him there, and then tells him where he has been.

The final report may be disseminated through the Central Educational Resources Information Center, United States Office of Education; the Tennessee Research Coordinating Unit for Vocational Education; the State Division of Vocational-Technical Education or through releases to the press or other mass media. The final report also provides a basis for the RCU to determine whether the conditions of the project grant were completed satisfactorily.

## REPORTING

The recipient of a research grant must submit a final report of the results within 60 days after completion of the project. Responsibility for the content of the report rests with the principal recipient or investigator. He should be cognizant of the fact that well-written reports enhance the value of good research. Thus, the highest professional standards of report writing should be maintained and a bibliographical style that can be used by other researchers should be followed.

Close cooperation between the principal investigator and the RCU staff member assigned to the project can resolve

many difficulties in report writing. A critique of the rough draft of a report by the RCU staff, and an informal review of the report by interested colleagues should help the writer avoid many editing problems, and, thereby produce a high quality final report.

## WRITING FINAL PROJECT REPORT

Purposes of the final report are to communicate to others in the profession the significant findings of the project and to give evidence of the completion of the funded project. The form of the report will depend largely on the type of project. A developmental project involving the preparation of a product will contain that product as a major portion of the report. However, this alone is not sufficient. The processes, trials, and finalized product warrant explanation.

The final report should contain sufficient information so that a reader could reconstruct substantially the same situation and fully realize the assumptions and conditions upon which the conclusions and recommendations are based. A proposed format for research reports follows. This format with adaptation will apply to most final reports.

I. Preliminary Pages. The preliminary section of the final report include:

(a) Cover Pages. The front and back covers should be of heavier paper and the same size of that used for the text. The front cover should contain the information shown in Appendix A, "Sample of Cover Page."

(b) Table of Contents. This should be a separate page listing the major sections and subsections of the report. A good table of contents will show how the report is organized and save time for the readers.

(c) Preface or Acknowledgements. Researchers may wish to prepare a simple preface with a statement about the field being studied or the major problems involved. Significant contributions by professional groups or individuals with their proper identification should be acknowledged.

II. Abstract. An abstract at the beginning of the report provides a condensed summary of the study. It gives a brief description of the problem investigated, scope of the study, objectives pursued or hypotheses tested, methods used, results obtained, highlights of the findings and their significance and implications, and any recommendations for further action. The abstract should be limited to 600 words.

III. Body. This section of the final report describes the organization and result of the research performed. Use the following headings to identify the various aspects of the report:

(a) Introduction. Most reports need an introductory section to orient readers to the problem. It may contain a brief review of related research, scope of the project, importance of the problem, and limitations of the study.

(b) Statement of Problem. This section gives a concise description of the problem investigated. The problem statement should contain an element of perplexity, something that needed solving.

(c) Rationale. The rationale describes the relationship of the problem investigated to vocational education. It should include background information on the problem, and research related to the problem. The method or procedure used in the study should be supported as to why it was chosen for this particular project.

(d) Objectives. State the objectives achieved in the project, the hypotheses tested, the products developed, or the specific questions answered. The objectives should be listed in such a way as to show their relationship to the problem statement, rationale, and methodology.

(e) Methodology. Significant information that might help readers understand the project design should be included in the methodology section. This methodology should discuss how the project was conducted. It may describe experimental and control groups (if any), preparation of data collection forms, methods of analysis, and techniques used in the development and evaluation of special materials and products.

(f) Findings. The value of a final research report depends upon how well the findings are organized and presented. To be effective, this section should be organized so that findings are carefully and accurately described in relationship to the objectives of the project. All findings should be based on significant project data.

(g) Interpretation of Data. This section should explain what the findings of the project mean. Therefore, the findings presented, as well as the mode of interpreting them, depend on the nature of the problem. Important in interpreting data is the discovery of an underlying theme, a recurring message that develops out of the kaleidoscopic data of the study. (See section of handbook on "Analyzing Data.")

(h) Conclusions and Recommendations. This section is the most frequently used part of the report. It should outline what was or what was not accomplished in the study. Recommendations, if any, should follow the conclusions and explain possible uses to which the results may be put, either in educational practice or further study. The investigator may also desire to suggest certain implications which could relate to new educational developments or innovations. All conclusions and recommendations should be based on findings of the study.

IV. Supplementary and Appendix Materials. Items to include in this section are:

(a) References. All references should be numbered and keyed to the reference number used in the text. Some writers may prefer a separate section for references while others may prefer to list references at the end of each section or at the bottom of each page on which the citation is made.

(b) Bibliography. If used, the bibliographical section should list documents that supplement information given in the report. Entries may be grouped according to classes (books, subject matter, or some other category) and arranged alphabetically by the author's last name.

(c) Glossary. A glossary may be included in the report when unfamiliar terms are used or when definitions in the body of the report are not considered adequate.

(d) Appendix. The appendix includes information which can be studied separately and would only delay readers with details if presented in the text. References cited in the body of the report should guide readers to the appendix. The following materials should be included in the appendix:

(1) Facsimiles of questionnaires or other forms used in the study
(2) Course outlines or units developed in the study
(3) Details of models used in the study
(4) Methodological details
(5) Extensive tables or charts for which a summary is given in the text
(6) Tests, measurements, or inventory samples

In summary, the following format should be used in preparing the final project report:

I. Preliminary Pages

a) Cover Page (See Appendix A)
(b) Table of Contents
(c) Preface or Acknowledgements

II. Abstract

III. Body of Report

(a) Introduction
(b) Statement of Problem
(c) Rationale

(d) Objectives
(e) Methodology
(f) Findings
(g) Interpretation of Data
(h) Conclusions and Recommendations

IV. Supplementary and Appendix Materials

(a) References
(b) Bibliography
(c) Glossary
(d) Appendix

(1) Facsimiles of questionnaires or other forms
(2) Course outlines or units
(3) Details of models
(4) Methodological details
(5) Extensive tables of charts
(6) Tests, measurements, or inventory samples

## ANALYZING DATA

Contrary to the popular assumption, facts do not speak for themselves. The researcher must decide upon the method of analysis he will use to bring meaning to his data. He needs to ask, "What does the data mean," thereby looking for causes, principles, values, and patterns manifested in the data. The two types of analysis that may be used are (1) logical and (2) statistical.

Logical analysis is assigning meaning to data by examining its logical relationships, by ascertaining the logical consistency of a set of facts, and by arriving at conclusions inductively. It is based on the reasoning processes.

Studies resulting in quantified data demands the use of statistical analysis. It is based upon the principle that from a carefully chosen sample, the researcher may within limits

draw conclusions about the universe or the total number of instances which were not actually investigated.

It is probably better for the beginning researcher to use simple statistical techniques which he understands than complex ones which he has to take on faith. Elaborate statistics cannot substitute for basic understandings.

## FINAL REPORT SPECIFICATIONS

In submitting final project reports, follow these specifications:

(1) Submit ten completed copies of the final report to the RCU staff member assigned to the project. A cover letter should accompany the final report (See Appendix B for Sample of Cover Letter).

(2) Report should be prepared on 8 1/2" by 11" letter-size paper. Front and back covers should be of the same size.

(3) Double-space report. Left margin should be 1 1/2", and all other margins should be at least 1".

(4) Page numbers should be centered at the bottom of each page.

   (a) Preliminary pages (table of contents, acknowledgements) and abstract should be numbered with lower case Roman Numerals. The cover pages are not counted or numbered.

   (b) Text and appendix pages should be numbered consecutively in Arabic.

(5) Each table, chart, or graphic presentation should be given a number, a suitable title, and placed as near as possible to the first reference made to it in the text.

(6) Report should be stapled or stitched securely along the left side. Do not bind with plastic combs.

## SUBMITTING FINAL PROJECT REPORT

The final research and development report should be submitted not later than 60 days following completion of the project. It should be submitted to the RCU staff member assigned to the project. Therefore, it is imperative that the staff member be informed as to the nature of the final report.

Each final report will be reviewed for completeness and accuracy by the Research Coordinating Unit. The author may be asked to make minor changes. Recommendations concerning distribution and treatment of the report will be made by the RCU.

*APPENDIX A - SAMPLE OF COVER PAGE*

Final Report

*Title of report*

A STUDY OF THE VOCATIONAL NEEDS

OF THE

ANYWHERE, TENNESSEE HIGH SCHOOL

A *(type)* - Grant Research Project

Presented to

The Tennessee Research Coordinating Unit

*Name of person responsible for conducting project*

by

John L. Doe

May 197_ *Date report was submitted*

*APPENDIX B - SAMPLE OF COVER LETTER*

Mr. Larry W. Sanders
Regional Research and
Development Coordinator
Research Coordinating Unit
Park Century Building
Jackson, TN 38301

Dear Mr. Sanders:

The enclosed document constitutes an effort to determine the vocational-technical education needs of Anywhere High School. I hope that the information contained herein meets with your approval.

The *(type)*-Grant expenses incurred while researching this study were:

| | |
|---|---|
| Personnel | 298.65 |
| Travel | 65.00 |
| Supplies and materials | 120.35 |
| Communication | 11.00 |
| Services | 5.00 |
| TOTAL | $500.00 |

If there are any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

John L. Doe

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